

lec44

Content created by Anonymous

There are no pages at the moment.

Spring 2009

Semester Contributions

In the beginning of this semester, I spent most of my time researching about the backwash sand filter system. Then Haley and I build and organized our system. Then we determined what factor in the sand filter should we test during this semester. I also helped write the our [goals](#) and type up some of the meeting minutes. In terms of system organization, I assisted with Process Control setup and I helped set up the whole system for experiment. I also ran many experiments varying the sand depth and flow rates. I hope to get solid data at the end of the semester. For the [midterm report](#), I worked on the experiments and conclusion sections.

For the second half of the Spring semester the sand filter team was joined with the aeration team (Tanya and Tiffany). As a result, Haley and I updated Tanya and Tiff about the sand filter method and what we have done so far and what else needs to be done. Aside from linking the two teams, we work together to modify the experimental apparatus to include bubble collector container and bubble chamber called "Bob". Bob was the apparatus used in the Aeration Team. After finalizing the experimental setup, we spent a lot of time in the lab to fix the leaks and other problems that occurred during our experiments. I mainly came in the morning to stop the overnight experiment and start another experiments.

Haley and I contributed to the pages of our initial experiments for the sand filter methods. While Haley created the various diagrams for the website, I helped to linked the excel files onto the website and organized them. Furthermore, I also contributed to meeting minutes and future goals.

Fall 2008

Semester Contribution

The first thing on my agenda was to get oriented to the plate settler spacing research team (a part of the AguaClara project). To get a better understanding of AguaClara project, I read the research articles regarding water treatment. For the beginning of the semester, I am dedicated to completing the documentation of the setup of the whole mini plant setup with the plate settler tubes.

Under the guidance of Matt Hurst, I was able to record a very accurate documentation of the experimental setup. Aside from detailed drawings and notes, record the process with digital photos. Instead of using straws and a honeycomb, our group order three sizes of tube-manifolds for the tube settler spacing tubes.

For the teach in, I presented a simply schematic for the experimental setup. Basically, I mapped out how the water, clay, and alum flow through the system. In addition, I decided where the turbidity is measured. [Teach-In](#)

For the midterm report, I got familiar with Wiki. I explore the color fronts, linking attachments, equations to the page that is being edit. [Midterm Report](#) I have done several [meeting minutes](#).

In the final report, I wrote and presented materials and information for the method section. In the method, I wrote about the details of the setup. I present why each tubing was essential for the setup in a detailed bulleted format. In addition, I explained in detail each components of the system. For example, I explained why the flocculator was extended. For our [final report](#), I was responsible for the method section. In addition, I contributed to our [quiz](#) for next semester.

Furthermore, I compared the differences between the original setup to the improved setup. In the comparison, I specified why and how my team came up reasoning for each specific change. Additionally, I reported that our changes in the setup did indeed enhance the setup with our observations and data collected.

Moreover, I documented the Process Controllers. I presented in a table format on what parameter were use in Process Controllers. I find this necessary to document because Process Controllers may seem hard to understand. However, by using and documenting Process Controllers, I got custom to it. By presenting the details of Process Controllers, I believe it will help others to setup their systems.

Additionally, I documented the creation of our setup with photos. After picking and editing the photos, I designed a photo gallery on Wiki for anyone to view. The photo gallery consist for completed system and the hardships of designed an optimal setup.

For the final presentation, I will present to the Agua class my contribution to the project. I will be explain the details of the improved setup and the problems that occurred in our original system. Within my presentation, I present images to enhanced our team project. In addition, I have created questions for the next semester quiz.

Aside from extending my familiarity with Process Controller and Wiki, I also have a better understand of setup and how to consider and think what needs to be done to further improve the system. Throughout the semester, with the help of my team member, I build upon my previous knowledge of AguaClara. With this knowledge, I believe it will an aid for my next semester contribution to AguaClara.